## ABSTRACT

A process for producing an organotitanium compound capable of regioselectively converting a substituted acetylene compound into polysubstituted benzene or polysubstituted pyridine. The process comprises reacting an acetylene compound represented by the formula (1)

$$R^1 - R^2$$
 (1)

[where  $R^1$  and  $R^2$  denote a  $C_{1-20}$  alkyl group or the like] in the presence of a prescribed titanium compound and a Grignard reagent with a compound represented by the formula (4)

$$R^3 \overline{\qquad} R^4 \tag{4}$$

[where  $R^3$  and  $R^4$  denote a hydrogen atom or the like] and further reacting with a compound represented by the formula (5)

$$Z = \begin{pmatrix} R^5 \\ X^6 \end{pmatrix}$$
 (5)

[where R<sup>5</sup> denotes a hydrogen atom or the like, Z denotes CR'

(where R' denotes a hydrogen atom or the like), nitrogen

atom, X<sup>6</sup> denotes a halogen atom or the like, and m is 0 or

1]

thereby giving the titanium compound represented by the formula (6) and/or (7).

[where  $R^1$  ~  $R^5$ , Z,  $X^6$ , and m are defined as above; and  $X^p$  and  $X^q$  denote any of  $X^1$  ~  $X^4$ ].